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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/743,327	12/23/2003	Byoung-young Bae	1793.1105	5588

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EXAMINER

RAY, GOPAL C

ART UNIT PAPER NUMBER

2111

DATE MAILED: 12/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/743,327	Applicant(s) BAE ET AL.	
	Examiner Gopal C. Ray	Art Unit 2111	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 23 November 2005.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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1. The examiner acknowledges the receipt of the amendment filed 11/23/05 under BOX AF in response to the office action mailed 10/14/05. However, the examiner wants to point out that the rejection was non-final rather than final mentioned by applicant in the front sheet of the amendment. Claims 1-18 are presented for examination.

2. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

3. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 2, 4-10 and 12-18 are rejected under 35 U.S.C. § 103(a) as being unpatentable over US Patent 6,295,569 granted to Shimura et al. in view of US Patent 5,881,309 granted to Ohashi et al.

As per claim 1, the reference of Shimura et al. teaches "an optical disc drive" in Fig. 1, element 10; "an optical disc" in Fig. 1, element 22; "a driving unit ..." (lines 2-3) in Fig. 22, element 280 and "a control board to control the driving unit ..." (lines 4-5) in Fig. 20A, element 210.

The reference of Shimura et al. fails to expressly teach that the control board is separate from the driving unit. However, the above feature was well known to one of ordinary skill in the data processing art at the time the invention was made as evidenced by Ohashi et al. The reference of Ohashi et al. teaches the feature in Fig. 5, element

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168. It would have been obvious choice of design to move the control board away from the drive in the system of Shimura et al. to arrive at the claimed invention because this is a straightforward possibility from which one of ordinary skill in the art at the time the invention was made would select in accordance with circumstances without the exercise of inventive skill. The motivation for combining the references is given by Ohashi et al. in col. 6, lines 36-42.

As per claim 2, the reference of Shimura et al. teaches "PCMCIA slot" in col. 7, line 48.

As per claim 4, the claim is rejected for similar reasons as discussed in the rejection of claim 1 above.

As per claim 5, the reference of Shimura et al. teaches "wherein the driving unit is an external device that connects to the computer by a cable" in Fig. 1, element 20.

As per claim 6, the reference of Shimura et al. teaches "wherein the driving unit is an internal device that fits into a peripheral slot of the computer" in Fig. 21, elements 10, 18 and 26.

As per claim 7, the reference of Shimura et al. inherently teaches "wherein the controller is connected to the driving unit by a cable" in col. 4, line 64 – col. 5, line 4.

As per claim 8, the reference of Shimura et al. teaches "wherein the controller is an external device that connects to the computer by a cable connected to an interface port" in Fig. 1, elements 20 and 26.

As per claim 9, the reference of Shimura et al. teaches "wherein the controller is connected to the driving unit by a bus in the computer" in Fig. 22, element 275.

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As per claim 10, the reference of Shimura et al. teaches "PCMCIA interface" in col. 7, line 48.

As per claim 12, the claim is rejected for similar reasons as discussed in the rejection of claim 4 above.

As per claims 13-18, the claims are rejected for the same reasons as discussed in the rejection of claim 12 with the exception of added limitation(s) in each claim. The examiner takes Official Notice that the claimed features such as "the controller connects to the computer via a standardized interface slot" (claim 13), "the connector of the driving unit does not perform control functions" (claim 14), etc. are well known in the data processing art. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Shimura et al. to implement the above claimed features to obtain the claimed invention because these are straightforward possibilities from which one of ordinary skill in the art at the time the invention was made would select in accordance with circumstances without the exercise of inventive skill in order to allow the system of Shimura et al. to be compatible with a widely used standard and to allow the system to take advantage of the many benefits provided by those features.

5. Claims 3 and 11 are rejected under 35 U.S.C. § 103(a) as being unpatentable over US Patent 6,295,569 granted to Shimura et al. in view of US Patent 5,881,309 granted to Ohashi et al. as applied in claim 1 above, and further in view of US Patent 6,502,755 granted to Liu et al.

As per claim 3, the claim is rejected for the same reasons as discussed in the rejection of claim 1 with the exception of "the interface device is a USB port". However, the above feature was well known to one of ordinary skill in the art at the time the invention was made as evidenced by Liu et al. The reference of Liu et al. teaches the feature in col. 3, lines 63-64. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Shimura et al. to implement the above feature to obtain the claimed invention because both the systems are analogous to improving optical data storage unit's operability and the above feature of Liu et al. would allow the system of Shimura et al. to be compatible with a widely used standard and to allow the system to take advantage of the many benefits provided by a USB port.

As per claim 11, the added limitation of the claim is rejected for the same reasons as discussed in the rejection of claim 3.

6. Applicant's arguments filed on 11/23/05 have been fully considered but are moot in view of the new ground(s) of rejection. Furthermore, applicant argues that the control board to control the driving unit being installed separate from the driving unit is more than a design choice or shifting of parts. However, applicant must be arguing from the specification rather than the claims because claims do not recite such features. The examiner cannot read limitations from the specification to the claims. The invention as claimed reads on the above prior art.

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Applicant is urged to consider the references. However, the

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references should be evaluated by what they suggest to one versed in the art, rather than by their specific disclosure.

If applicants are aware any better prior art than those of record, they must bring the prior art to the attention of the examiner. Applicants are also reminded that each individual associated with the filing and prosecution of a patent application has a duty of candor and good faith in dealing with the Office, which includes a duty to disclose to the Office all information known to that individual to be material to patentability as defined in 37 CFR 1.56. Applicants are advised to submit any information material to patentability in accordance with 37 CFR 1.97 and 1.98.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gopal C. Ray whose telephone number is (571) 272-3631. The examiner can normally be reached on Monday - Friday from 8:00 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Rinehart, can be reached on (571) 272-3632. The fax phone number for this Group is (571) 273-8300.

Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [[mark.rinehart@uspto.gov](mailto:mark.rinehart@uspto.gov)].

All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record

includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to TC central telephone number is (571) 272-2100. Moreover, information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Lastly, paper copies of cited U.S. Patents and Patent Application Publications ceased to be mailed to applicants with office actions as of June 2004. Paper copies of Foreign Patents and Non-Patent Literature will continue to be included with office actions. These cited U.S. Patents and Patent Application Publications are available for download via Office's PAIR. As an alternate source, all U.S. Patents and Patent Application Publications are available on the USPTO web site ([www.uspto.gov](http://www.uspto.gov)), from the office of Public Records and from commercial sources. Applicants are referred to the Electronic Business Center (EBC) at <http://www.uspto.gov/ebc/index.html> or 1-866-



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217-9197 for information on this policy. Requests to restart a period for response due to a missing U.S. Patent or Patent Application Publications will not be granted.

*Gopal C. Ray*  
GOPAL C. RAY  
PRIMARY EXAMINER  
GROUP 2100